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8	US EPA JONES ROAD SUPERFUND GROUND WATER PLUME
9	SUPERFUND SITE
10	Public Meeting
11	Bleyl Middle School, 10800 Mills Road
12	Houston, Harris County, Texas
13	AUGUST 10, 2017
14	6:36 p.m. to 8:07 p.m.
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1	APPEARANCES
2	
3	ON BEHALF OF THE US EPA:
4	Donn Walters, Community Involvement Coordinator walter.donn@epa.gov
5	
6	Camille Hueni, Remedial Project Manager hueni.camille@epa.gov
7	Raji Josiam, Remedial Project Manager josiam.raji@epa.gov
8	John Meyer, EPA
9	meyer.john@epa.gove
10	U.S. EPA, Region 6 (7SF-RA)
11	214.665.8259 or 1.800.533.3508 (toll free) josiam.raji@epa.gov
12	Josiam.rajiwepa.gov
13	
14	ON BEHALF OF TEXAS COMMISSION ON ENVIRONMENTAL
15	QUALITY (TCEQ):
16	Marilyn Long, Project Manager marilyn.long@tceq.texas.gov
17	
18	Texas Commission on Environmental Quality Remediation Division (MC-136) 512.239.0761
19	512.239.0761
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2	PUBLIC MEETING
3	(Public meeting commenced at 6:36 p.m.)
4	MR. WALTERS: So the first thing,
5	welcome this evening to an EPA public meeting in
6	cooperation with our other partners, the State and
7	the other partners, to discuss specifically the Jones
8	Road Superfund Site here in the community. That's
9	the purpose of this evening's meeting.
10	I do want to mention, if you haven't
11	signed in, make sure you do sign in. And for you we
12	have copies of the facts sheet on the back table, a
13	whole stack of fact sheets actually, so please get
14	one. And there were several copies of the proposed
15	plan back there. I'm not sure. Those all may be
16	gone by now.
17	Okay. Let's kind of go around and see
18	who's here. First of all, could our EPA site team
19	please introduce yourselves.
20	John, you want to start?
21	MR. MEYER: Sure. I'm John Meyer.
22	I'm the Chief of the Superfund Remedial Branch at the
23	EPA office in Dallas.
24	MS. HUENI: And I'm Camille Hueni.
25	I'm the Remedial Project Manager for Jones Road out

1	of the Dallas office.
2	MS. JOSIAM: And I'm Raji Josiam. I'm
3	also Remedial Project Manager, and I will be moving
4	into the Jones Road site.
5	MR. WALTERS: And who is here from
6	TCEQ?
7	MS. LONG: I'm Marilyn Long. I'm TCEQ
8	Superfund Section, Austin.
9	MR. WALTERS: Do we have any other
10	Federal Government guests? Anyone else here from
11	Federal?
12	And how about from the State? Who's
13	here from the State? Other State agencies? Harris
14	County. I know there's someone here from Harris
15	County.
16	MR. MULLER: Stuart Muller.
17	MR. WALTERS: Go ahead and introduce
18	yourself, Stuart.
19	MR. MULLER: Harris County Pollution
20	Control.
21	MR. WALTERS: Yeah, very good. Anyone
22	else from Harris County?
23	UNIDENTIFIED SPEAKER: We couldn't
24	hear that. Could you repeat who that was?
25	MR. MULLER: Stuart Muller from Harris

County Pollution Control.

2.1

MR. WALTERS: So again, the purpose of this evening's meeting is to discuss the Jones Road Superfund Site here in the Cypress area of northwest Houston. We will be taking comments on the site.

And to do that we are required to have a court reporter, who is right here in the front. She will be creating a transcript for us of what you say, and how we respond to that.

I would ask you to limit your comments to three to four minutes at most, so we can make sure to get everyone in. If there's time, we'll come back. But try to limit your comments to three to four minutes starting out, and of course, our site team is here to respond to those questions or comments.

And you can also email your comments to us. The email addresses are on the facts sheet and so forth, and a lot of people use email. So if you want to think about something and email us, the email addresses are there for you to use.

Let's see, anything else? I will say, and I should have said it up front, we thank the school here, the middle school, for hosting us and letting use this really nice facility. So we thank

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1
     them for doing that. I see one of the instructors
     back there in the back.
2.
                    As some of you know we had a number of
 3
     these meetings over in the Matzke Elementary School
4
     starting out, so I see some familiar faces from those
5
 6
     meetings. So we're glad you're still following all
     of this.
                    So let's get started. Camille is
 8
 9
     going to give her talk and kind of tell you what's
10
     going on, a good outline. We will start a comment
     period after that.
11
                    MS. HUENI: Thank you.
12
13
                    Everybody, we welcome you, and I'm
     happy that you're able to turn out in this hot
14
15
     weather and muggy weather. And we really appreciate
     you wanting to be involved in this.
16
                    So let's go ahead and get started.
17
     Let me have Slide 1. Okay. This is just an
18
     orientation, of course, of this area again. And I
19
20
     know that y'all are already familiar with it, but I
2.1
     wanted to point out also -- Where's my pointer? Oh,
22
     here it is.
23
                    The thing I wanted to show here, what
24
     the actions that we're going to be recommending
25
     tonight are really concentrated in an area right
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around the zone of the initial release. So it's -
it will be a very small footprint.

And the release area was here at Bel

2.1

And the release area was here at Bell Cleaners. They operated for about 14 years, ending in 2002. And like a lot of dry cleaners that use tetrachloroethene, that was the case here, and they had a release. So that was what really started all of this.

Our purpose here at Jones Road is really groundwater action. So most everything that we do now is actually considering impact to groundwater and working to remediate that.

Next slide. I do want to emphasize too, the work that has been completed out here. Most of you are aware of the fact that we completed a waterline in 2008 within this area. And again, that was for the purpose of getting people onto a public water supply system. And so we were able to connect to 144 residences at that time.

The initial Record of Decision came out in 2010, and that was -- you know, that's the main document for us. What we're here for tonight is actually to amend that ROD for two target zones, two soil zones that are acting as sources to groundwater.

2011, we plugged and abandoned 94

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residential wells for those people who actually hook
1
     up to the water system. And in 2016, we actually
2
     began work for restoration of the shallow water
3
     bearing zone.
4
5
                    And if you have a chance to look at
6
     the facts sheet and the proposed plan, that's the
     very first aguifer -- little aguifer that we deal
     with, but it's actually very shallow. And we started
8
9
     injection of the -- movement on that in January of
10
     2016. So that's ongoing.
                    Okay, next slide. Okay. This is, you
11
12
     know, just another map that's more for reference, and
13
     this gives you an idea of the area. This area here
     (indicating) is actually the release area, right here
14
15
     on Jones Road and Bleyl Lane.
16
                    And the other thing I wanted to point
     out is the water connection area that was done in
17
18
     2008. Okay.
19
                    MR. MANNINA: I've got a question on
20
     the previous slide. It showed 96 wells that were
2.1
     capped, and you also showed 144 homes that had water
     connections.
22
23
                    MS. HUENI: Yes.
24
                    MR. MANNINA: Why aren't those wells
25
     that were part of that 144 not capped?
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MS. HUENI: You know --
 1
                    MR. MANNINA: (Inaudible.)
2
 3
                    MS. HUENI: You know, that was part of
     the arrangement for the water connections. And I
4
5
     don't know. Marilyn may have -- you were here at
6
     that time, so...
                    MS. LONG: I didn't hear all the
7
8
    question. If you can repeat it, please.
9
                    MS. HUENI: Let me give you the
10
    microphone so everyone can hear.
                    MR. MANNINA: My name is Joe Mannina.
11
12
                    My question was: They plugged 96
13
    wells, but you provided 144 waterlines.
                                              So my
     question was: Why did they only plug 96 wells?
14
15
     weren't all 144 plugged?
16
                    MS. LONG: That's a good question.
17
    Because part of the agreement when the folks agreed
     to sign up for the -- It's a good question because
18
     when there was the agreement set up for the waterline
19
20
     agreement, the connection also required from White
2.1
     Oak Bend, the service provider, would be that the
    wells would be plugged.
22
23
                    I hadn't seen the statistics on, you
24
    know, that differential. That's something that I
25
     could work and coordinate with EPA, and we could
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1
     check with White Oak Bend on the numbers to make
     certain on that.
2.
                    MR. MANNINA: I'd like to know why
 3
     that wasn't done.
4
5
                    MS. LONG: Yes, yes. I can work with
6
     you and follow up on that.
                    MS. HUENI: Some of those wells, I
 7
     think -- some of the properties, if I remember from
8
9
     reading some of that material within that time, there
10
     were some properties that actually shared wells and
     that may be part of it. But that's a good question,
11
     and we'll find out about that.
12
13
                    Okay. Again, the purpose of the
14
     meeting is really to receive your comments on the
15
     proposed plan of remedy amendment. And again, we're
     taking comments at this meeting or questions.
16
                    And then, we'll also be continuing to
17
     take your comments during the public comment period.
18
     I don't know if we mentioned that. But that started
19
20
     August the 7th.
2.1
                    MR. WALTERS: August the 7th through
     September the 5th.
22
23
                    MS. HUENI: So we'll be taking those,
24
     either in writing or email. And all that information
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is on either the larger proposed plan or the facts

sheet.

2.1

The one thing to know about this one action that's being proposed: It revises the original action for the shallow area sources for in-situ enhancement or treatment that was selected at the time to another alternative, soil vapor extraction, which we think is going to be much more effective. We actually did a pilot test on that in 2016, so we know that's going to work.

And at the time the ROD was done, we were aware that there was a zone that was unsaturated from about 60 feet to 110 feet below surface. It's right on top of the deep Chicot Aquifer, and it is unsaturated. And so in our design phase, we were out there doing some pilot testing and some more work and we found that that zone also carries a pretty good soil vapor decontaminate zone.

So we have two sources here that we're dealing with tonight. Now, overall for the project, we will be addressing three of those zones that we think are the source areas for underlying groundwater. The shallow water bearing zone also acts as a source.

That one is under the remediation right now.

These two soil zones with the soil vapor phase contamination, those are the remaining two. So we'll be addressing those with this preferred alternative.

2.1

So again, all this is about is actually completing the elimination of the sources for the underlying groundwater. And we were talking in our office the other day and, you know, someone said this -- and it's kind of common sense when you think about it -- but you can't restore groundwater, which was the original directive of the original ROD, unless you eliminate or substantially reduce the sources of contaminants to groundwater, and that's what we're doing here.

Okay. I think -- I like this slide. This is kind of fun. Okay. Here's the point of the initial release of the shopping center. Most of what we're finding, the mass is more or less around the northwest corner of that building, you know, where the dry cleaners was located. And right under that there is a shallow clay zone that holds a lot of the mass for soil vapor, and that's one of the sources that we're going after right now. This area right here.

The next zone, this is a shallow water

bearing zone which is ongoing. We are actually addressing that right now.

2.1

2.5

And then next you have this zone from about 60 feet -- right here. This is the unsaturated Chicot -- 60 feet to 110. And this is one that is the new area that we're going after also, and also going to be proposed for a soil vapor extraction.

So that kind of tells you where we are with the relationship to the release zone and the underlying groundwater. And the saturated groundwater in the Chicot is located starting at 110 feet deep. So that's the area that a lot of private wells were completed in, as you're aware of.

Okay. Just very simply again, this is a ROD amendment. And the reason we're doing this is we did find, as we indicated, additional sources of contamination there in that lower zone and the original technology that we had selected for the shallow source area soil, that one was just not going to be feasible for the cleanup. So that's the whole reason we're here tonight.

And I like this slide too. This slide tells the whole story. This is an overlay of both the shallow zone and the underlying deeper zone. And the core of the contamination is right here. You can

```
see this is Jones Road, and the core is right here.
1
                    So what this tells us too is that we
2
     have the shallow zone we're going after, the same
3
     core, and then deeper this is the extent of the soil
4
     vapor zone that we're going after.
5
                    So that -- that is the extent of what
6
7
     we're going to be treating through soil vapor
     extraction. So it's going to be a very limited
8
 9
     construction. We think for both zones we can
10
     complete the construction of the design in about a
     month. And potentially we think that the clean up
11
     time for each of those zones is going to be from two
12
13
     to two and a half years, which, you know, compared to
     other technologies is very short term.
14
15
                    So we had a question from one of the
     neighbors in the area who had a question, you know,
16
     is this going to impact me? I think he lived off of
17
     Jones Road north of this area. And really our
18
     construction footprint is really tied to that
19
20
     immediate area of release, so we're not expecting a
2.1
     whole lot of disruption, and our construction time is
     going to be very short.
22
23
                           This is just a reminder again
                    Okav.
24
     about the schedule. The public comment period
```

August the 7th through September -- I'm sorry.

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August the 7th through September the 5th. So, sorry
1
     about that. We want to be able to make our final
2
     decision on this part of the project by the end of
 3
4
     September.
 5
                    So there's a process that we have to
6
     go through to address comments. There'll be -- part
     of the final ROD, there'll be a responsiveness part
     at the back where we respond to the comments, and
 8
     they're considered in our final action. So there's a
 9
10
     lot to do between now and then, but it's all doable.
     So again, we're aiming for the end of September.
11
                    Our project construction, which will
12
13
     include design as well as the construction, right now
     we're estimating starting that, probably, in October
14
15
     of 2017, and actually ending construction in
     December 2018. So it will go fairly quickly. And I
16
17
     think that is it.
                        Is that it, Raji?
                    UNIDENTIFIED SPEAKER: Define
18
19
     construction.
20
                    MS. HUENI: Well, construction on
2.1
     this, what we'll do is we'll go through our remedial
     design phase where you -- and we had the pilot test
22
23
     for both of the zones that really will tell us what
24
     the spacing of the wells will be. We have a pretty
25
     good idea of that already. So your design phase can
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last up to a year. I think ours could be even
1
     shorter.
2.
                    And then remember, once we go to
 3
     construction, and we'll be going to a construction
4
     contract for that. That's all part of it. And once
5
     we start construction, it will be completed in
6
     probably a month. So that's pretty short.
                    At this time we're thinking about
8
9
     possible phasing the two zones separately, but all of
10
     that is going to be decided during our design phase.
                    MS. HAUS: Loral Haus, L-O-R-A-L,
11
     H-A-U-S.
12
13
                    I don't understand construction as
14
     relates to like how you construct a house or home.
15
                    MS. HUENI: For both of these zones
     we're going to be using soil vapor extraction wells,
16
     and so we already have an idea of what the spacing of
17
     that is going to be. I think we brought a couple of
18
19
     posters that have the conceptual design of what we're
20
     looking at now.
                    We'll have to connect those wells
2.1
     because as you extract the soil vapor, you want to
22
     carry it over to the treatment plant where it will be
23
     treated, and so there's some piping involved with
24
25
     that. It's not -- you're not going to see us, you
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know, digging up the whole parking lot. Most of the
1
     infrastructure is going to be the wells themselves.
2
     So it's pretty straightforward.
 3
                    So does that answer your question?
4
5
                    MS. HAUS: Then the construction is
     the well?
6
                    MS. HUENI: Well, construction is when
 7
     you're actually -- when you're getting out there and
8
 9
     you're actually constructing your design for any site
10
     that can be anything. It can be -- As you're
     probably aware, we do everything from putting in
11
     wells and treatment systems, which is what we'll do
12
13
     here. Other sites we do containment cells, or we may
     do like in-situ stabilization of the other sites.
14
15
                    So each one has a different plan
     that's really specific to that site. But I think for
16
17
     the construction footprint here, it's going to be
     very minimal. We aren't going to be, you know,
18
19
     bulldozing across.
20
                    MR. WALTERS: Before we move on to any
2.1
     more questions, I just want to interject one thing.
     John, did you have any comments that you would like
22
23
     to make here at this point?
24
                    MR. MEYER: Not at this time.
25
                    MR. WALTERS: You're okay?
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I meant to call on you earlier, but
1
2
     okay.
                    This gentleman is next, in the red
 3
     shirt.
4
5
                    MR. HAUS: I'm Donald Haus. Thank you
6
     very much. My name is Donald Haus. I'm a homeowner
     in the area, and really appreciate all the extra
     effort you're giving us to get us the additional
8
9
     education.
10
                    I'd like to go back to your Figure 5,
     which shows an approximate location -- yes, this
11
     one -- of the plume, a red spot. And I have two
12
13
     questions.
                    First, will the equipment be connected
14
15
     to some previously installed equipment located behind
     this shopping center, which is already there?
16
     don't believe you've removed it.
17
                    And second, can you make an
18
     approximation, just a guess, as to where you're going
19
20
     to put this construction?
2.1
                    I'm not upset. I just don't know
     where it's going.
22
23
                    MS. HUENI: Yes. And actually, I can
24
     point it out. And we also have a series of posters
25
     that probably has that information you're looking
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1 for. 2 MR. HAUS: Thank you. MS. HUENI: It has the proposed 3 network of wells and also the network of piping. 4 I think part of what we're thinking right now is that 5 6 the treatment center system is going to be back -back off the northeastern corridor, you know, the upper part of the strip. So it will be out of the 8 9 way and out of sight. It will be in the background. 10 MR. HAUS: Northeast to me is the 11 upper right-hand corner. MS. HUENI: Yeah. That's where we're 12 13 thinking about. 14 MR. HAUS: It pretty much is on that 15 side of Jones Road, not the Ace Hardware store side of Jones Road? 16 MS. HUENI: Well, over here across 17 Jones Road is the only one that's on that side of 18 Jones Road. But we were talking a little bit earlier 19 20 about tying that in also, and since we'll be tying it 2.1 in with the pipeline, it's not very bad. We can either do directional drilling across to and tie it 22 23 in. 24 It's important we put that in our 25 design because we want to be able to capture this

over here. 1 2 MR. HAUS: It's just going under Jones 3 Road requires y'all's special permit. Thank you very much. 4 5 MS. HUENI: Okay. Thank you. 6 MS. BONTA: Pam Bonta, B-O-N-T-A. 7 And I'm just curious, since this is a superfund site, and I went and visited the tenant in 8 9 this building yesterday, and it's an Indian gentleman 10 who has the shop. On the corner it's a cement slab, 11 and from what I understand those vapors can come up through those cement slabs. He doesn't seem to know 12 13 too much about it. But why are these people allowed to 14 15 still be in this building? It is harmful to their 16 health, and in time very likely that they could get cancer. Why wouldn't this be a fenced area, and 17 deemed for nobody to enter this? It makes sense to 18 me that, you know, you are cleaning it up, but 19 20 meanwhile it is a superfund site and people go there. 2.1 MS. HUENI: You know, that's a good question. Under the initial ROD, we did address 22 vapor intrusion. And, of course, everything we do 23 24 has a basis in assessing the risk to human health.

And we know that that slab has been a

```
barrier for the vapor accumulation, you know, and the
1
2
     soil just below it. So we are watching it very
     carefully, and we have been doing monitoring, both of
3
     the sub-slab and the indoor air.
4
5
                    We realize that that can change.
6
     that's something that we've been including in our
     monitoring. And we just recently did another indoor
     air sampling, and we'll be getting those results back
 8
 9
     pretty quickly. So we are watching that, and we are
10
     aware of that.
                    MS. BONTA: Because it's not worth his
11
12
     life, right?
13
                    MS. HUENI:
                               No, no.
14
                    MS. BONTA: Or anybody's?
15
                    MS. HUENI: No. We want to be
     responsive to that. So right now the levels are
16
     below what we would consider a threshold, but that
17
18
     can change.
19
                    MR. WALTERS: Again, come up to the
20
     mic so that everybody can hear what you have to say.
2.1
                    MR. PELLEGRINO: My name is Dan
     Pellegrino.
22
23
                    When you get the construction phase
24
     done and you have all your wells installed and you're
25
     extracting vapor, does that mean you're just strictly
```

```
putting a vacuum on it, or are you extracting
1
2
     material, or are you extracting water?
                    MS. HUENI: You know, it's primarily
 3
            There is -- the upper zone, we -- based on
4
5
     the pilot, we are expecting to get some water also
 6
     being extracted, and that will all be treated and
     handled through the treatment system.
                    So now the lower zone, it's pretty
 8
 9
     much going to be just vapor, but we are going to have
10
     a little bit of water or some water that we're going
     to have to deal with in our treatment system.
11
12
                    MR. PELLEGRINO: Once it's treated,
13
     does it go back into the ground?
                    MS. HUENI: You know what, I think the
14
15
     way -- I think we're looking at it right now that --
     I think one of our options is injection; is that
16
17
     correct?
18
                    MR. PELLEGRINO: Injecting it back
     into the ground once it's treated?
19
20
                    MS. HUENI: Uh-huh.
2.1
                    MR. PELLEGRINO: Okay.
                                            Thanks.
22
                    MS. HUENI: Okay.
23
                    MR. MUSTERS: Marc Musters. I have a
24
     couple questions. You're saying you're currently
25
     doing something in the shallow clay zone. What are
```

```
you exactly doing currently to remediate the shallow
1
2
     clay zone?
                    MS. HUENI: Well, we're actually not
 3
     in the clay zone yet. We're actually in the shallow
4
5
     water bearing zone.
6
                    And what we're doing in that is in
7
     January we started the in-situ bioremediation there.
     So we did our initial injection in that zone. And
 8
     that was confined pretty much that to entire parking
 9
10
     lot area. And so we've been doing monitoring since
     then to see how the contaminants are degrading.
11
     of course we're looking for, you know, PCE to
12
     actually degrade but also the daughter product that
13
     will come off of that too. So that's a work in
14
15
     progress.
                    We all want to see a lot of
16
     degradation, but we want to make sure it will be
17
     carried all the way through to completion. So part
18
     of that process is we have to continue to monitor and
19
20
     evaluating the monitoring, the results that we get.
2.1
                    And, you know, for things like that
     it's not unheard of to actually maybe have to do
22
     another injection, but a smaller one.
23
                                            It would be
     very focused to, I quess, the residual that's left.
24
```

So it's more of a longer-term project, but it's not

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going to be -- We've been looking at it for the past
1
2
     year and a half, but that's not out of the ordinary.
                    MR. MUSTERS: We've been looking at it
 3
     for 14 years.
4
5
                    The well sampling, are you doing any
     well sampling outside of the immediate zone?
6
                    MS. HUENI: Yes, we are. We just got
7
     through with a round of sampling. Most of the wells
8
9
     that we have on site -- the important thing for us is
10
     we put in four deep wells, CMT wells, which is each
     well actually contains up to six or seven tubing
11
     sampling ports through additional tubes. So you can
12
13
     really get a lot, sample a lot for intervals and get
     a lot of information for just one bore hole.
14
15
                    So we put a couple of those more to
     the south where we had our southmost well, and one
16
     off toward the southwest area.
17
                    MR. MUSTERS: How come you're not
18
     putting those monitoring results on the website?
19
20
                    MS. HUENI: Well, we will. In fact,
2.1
     we were talking earlier about the next time we get
     together is going to be a public information meeting.
22
     Because we've been doing monitoring. There's a lot
23
24
     of pieces we need to pull together for everyone. And
25
     we are seeing some interesting results from the
```

groundwater. 1 2 So give us a few more months to pull that together, and then we will start posting it. We 3 just need to tie it together in a report, and just 4 make sure that when we come, we can answer your 5 6 questions. 7 MR. MUSTERS: So on the vacuuming of the area, my experience with vacuuming is once you 8 9 establish a certain level of vacuum that the air 10 movement diminishes greatly. And it would make a lot more sense to me to inject air in a central spot to 11 12 move more of that air through the zone and to speed 13 up the whole process of the vaporization removal. On the treatment plant that you're 14 15 going to put in to treat the air that you're pulling out, what exactly is that treatment plant going to 16 do? 17 MS. HUENI: Well, you know, we don't 18 have that yet. That comes out in your design phase. 19 20 So if you want more information about that, we can 2.1 talk about that as we get deeper into that. Right now we just don't have the 22 23 details on what that would look like. We just know 24 that we'll have the wells. We'll have the piping

tying it together and going to the treatment system.

```
But as far as those particular design details, that
1
2
     will be coming later, and we can share that with you
 3
    quys.
                    MR. MUSTERS: All right. Thank you.
4
5
                    MS. HUENI: Okay. Thank you.
 6
                    UNIDENTIFIED SPEAKER: So the aguifers
7
     travel from the north to the southeast.
                                              Have you
     thought about doing any sampling to the north because
8
9
     of the fact that it's known that aquifers can subside
    back that way? Have you thought about doing any
10
     sampling to the north?
11
                    MS. HUENI: We do have some -- we do
12
13
    have some wells north of the site, and we have
     included those, I think, in the last couple of
14
15
     rounds, so we'll have that information. Most of what
16
    we're getting though is actually downgrading of the
17
     site, so as you would expect.
                    I know sometimes if you have a dense
18
19
    non-aqueous phase liquid that you can have some
20
    movement up-gradient, but we haven't seen that here.
2.1
    But it's always a good thing to be mindful of.
22
                    UNIDENTIFIED SPEAKER: Yeah, okay.
23
                    MS. WOOD: So I'm relatively new to
24
     this, and so I have a question. I'm Mary Wood. You
25
     talk about removal of the vapors. What about that
```

```
shallow clay? Are you doing any removal of the soil
1
     itself?
2
                    MS. HUENI: No. As you're aware, we
 3
     do have a building over that. So whatever we do,
4
     we're not going to be taking down the building. But
5
6
    with the soil vapor extraction, and actually we had
     the pilot test we had in 2016, actually showed that
    we get a pretty solid communication between the three
8
    pilot test wells that we have, and those are just
9
10
    placed at the edge of the building. So we actually
    know that we are getting communication across, and we
11
    have, you know, a pretty good idea of what the area
12
13
     of influence is going to be when we go to design.
                    So we don't want to tear down the
14
15
    building, but we think the SVE approach is really
16
     going to give us the best shot at removing a lot of
17
     that vapor phase.
                    MS. WOOD: So is this something you're
18
    going to have to repeat again in several years?
19
20
                    MS. HUENI: Actually, you know, I
2.1
     think of all our technologies, I think SVE, if the
     conditions are right, it can be the fastest, most
22
23
     effective technology for vapor phase contaminant.
24
                    MS. WOOD: So if or could. But the
25
     question is: Is it going to recontaminate the area,
```

and what is the life span of the PCE? 1 2 You talk about degrading it. How long What is the ideal conditions? does it take? And how 3 long will it be? 4 5 MS. HUENI: Well, with the SVE 6 systems, we're not actually -- it's different than what we're looking at with the groundwater, the shallow water zone where we're actually doing in-situ 8 9 treatment. With the soil vapor extraction, it's 10 usually pretty complete. And when we're implementing that as a treatment technology, we use performance 11 12 qoals. 13 We're looking at, when you're doing 14 the vapor extraction, you reach a point that actually 15 becomes -- that it actually flatlines on how much you're actually getting out. And at that point 16 you're reaching a point -- at that point you're 17 getting to a time where you think, okay, have we 18 gotten everything? 19 20 But you want to make sure that once 2.1 you turn the system off, that you're not going to have some kind of rebound effect, so that's also 22 factored in. And before you completely say we're 23 24 done here, you have to go through a series where 25 you're actually pulsing the system off and on because

```
you want to see how much of that rebound comes into
1
     play. And as time goes on, you'll actually see the
2
     rebound actually get diminished too. So that means
 3
     you're really getting to the end of it.
4
5
                    And I think for this area, these two
6
     soil areas, and the complication that we had with the
     structure overlying a lot of it, that I think that's
     the best approach right now that we're doing. And
 8
     it's a lot less expensive, and it doesn't take that
9
     long. It will be a month of construction.
10
                    MS. WOOD: I understand that it's less
11
12
     expensive. But you know when you're talking about
13
     their health and their lives and future, as long as
     that contaminated soil is sitting over there, are you
14
15
     not going to have a reoccurrence of what you already
     have?
16
                    MS. HUENI: I think right now that I
17
     think we can say it's going to be effective, and
18
     probably that treatment technology is probably the
19
     most effective for that kind of situation. So I
20
2.1
     think it takes it down pretty low.
                    MS. WOOD: Pretty low is -- I don't
22
23
     know if that's acceptable.
24
                    MS. HUENI: Well, you know, you're
     trying to get rid of -- if we reduce it
25
```

```
substantially, then you start eliminating that source
1
     to underlying groundwater. And that's a very
2
     important thing that we have to do. So if we had --
 3
     I really do think that's really the best technology
4
5
     for this area and those zones.
6
                    UNIDENTIFIED SPEAKER: So dig and haul
7
     is not an option? To dig that soil out?
                    MS. HUENI: No. That's not our plan
8
9
     right now because we want to try -- This, I think is
10
    going to be effective.
                    UNIDENTIFIED SPEAKER: But what if the
11
12
    people request it? Because you have a comment
13
    period, and if what the people requested that that
14
     soil be removed? Would that even be an option?
15
                    MS. HUENI: You know, we can always
16
     consider it. I think when you -- if you have
     something that's going to work and you can leave the
17
     structure there and have it be a permanent fix, then
18
     I think you've got to dot the I's and cross the T's
19
20
    without having to tear down somebody's business.
2.1
                    MR. HAUS: Thank you. Donald Haus
     once again. Marilyn, please correct me, my
22
     remembrance is that the EPA toleration point was --
23
24
    or perhaps the TCEQ toleration point for putting
25
     filters on wells was about five parts per million.
```

```
Parts per billion for PCE.
1
                    MS. LONG:
                    MR. HAUS: Billion, for PCE.
2
                                                   Thank
 3
     you.
                    My question then is: When this
4
     process is completed is the expectation, and I mean
5
6
     phase one completed, that the water would be
     contaminated to the point that it is at or below the
     five parts marker?
8
 9
                    And I'm not saying everybody should
10
     drink it I'm simply using that as a measure of
     success. Because greater than five parts other
11
     activities took place. Below five parts, it did not.
12
13
                    Thank you.
14
                    MS. HUENI: Thank you for your
15
     question.
                    You know, our goal here is that we
16
     achieve restoration of the aquifer. And for us, what
17
18
     that means is that your concentrations get to the
     drinking water level or below.
19
20
                    MR. WALTERS: This is your chance and
2.1
     opportunity to speak up on this issue.
22
                    MS. YOUNG: My name is Jackie Young,
23
     and I know some of the EPA folks here from working on
24
     the east side with San Jancinto Waste Pits. I moved
25
     my family to Cypress, just like a few miles from here
```

from the east side because, after all of my research, this was the safest environment that I could find without leaving Houston.

2.1

And I was happy, you know, back then to see the status of this site, but now I've been a bit concerned. So I want to first say to the people of the community that a big difference here between the site I worked with, we've worked with for the past six years, and the Jones Road site is that you guy's party who is responsible filed bankruptcy, so our government is footing the bill for the cleanup. So you don't have the tug of war that we had at the other site where you have the party responsible, who has an invested interest in this.

So I'm very appreciative of going through all of the documents I have for this site and seeing what the EPA has done and what TCEQ have done, going in and providing city infrastructure for safe water. I think that it's very commendable of what the agencies have done.

The organization that I founded, Texas
Health and Environment Alliance, serves as kind of a
third party watchdog for these types of processes.
And going through all of the documents, I did not
find anything about a community involvement plan or a

```
community advisory committee. And I know that we've
1
2
     already passed the first Record of Decision, but
     moving forward, it looks like there's about a year
 3
     and a half of time before you expect to get to the
4
     clean point you hope to get to.
5
6
                    So between now and then, what do you
7
     guys have in place for community involvement? And is
     there a CAC?
8
 9
                    MR. WALTERS: I'm just mentioning a
10
     couple of things, Jackie. Well, first of all, all
     sites are different. Every site has a different
11
12
     venue and outlook and scope on what we do and how we
13
     approach it.
                    But for this project, I can tell you
14
15
     that we have awarded two different technical
     assistance grants to the community to study this, and
16
17
     that group has since, as I understand it, they
     disbanded. But they were quite active here for quite
18
     a while. The person who ran it retired. I think she
19
20
     relocated.
2.1
                    But there has not been a CAG, so to
     speak, a Community Advisory Group here. There has
22
     not been a request for that. Not all sites want a
23
24
     CAG. But that's something that we can -- you know,
```

the agency can entertain moving forward if that's

```
necessary. And the RPMs can help advise us on that
1
2
     if necessary or needed.
                    MS. YOUNG: So the questions I've
 3
     heard today are excellent and I think that the
4
5
     community members are sincerely concerned, and we
 6
     don't all have the same, you know, maybe background
     in science or skill sets. You know, I couldn't go be
 8
     a nurse tomorrow.
 9
                    So I think that it would be a good
10
     idea, and I would like to request, you know, on
     behalf of living in the area -- The site is smack
11
     between my house and my mom's, so now I'm a resident
12
13
     by this site. So I would like to request that there
     are, at a minimum, regular meetings, maybe every
14
15
     three months. And whether that's an informational
     meeting, like you mentioned, when you get back the
16
     groundwater data or conclusive dataset, an
17
     informational public meeting or a smaller group
18
     meeting where you have community leaders attend and
19
20
     then go back to the communities and relay that
     information.
2.1
                    But I definitely would like to see a
22
23
     regular correspondence between agencies and the
24
     public over the next year and a half.
25
                    MS. HUENI: Okay. Well, you know, I
```

```
1
     think a lot of times, you know, it's very important
     for us to get your ideas too. So we want to know
2
     what's important to you quys. We have so many sites
 3
     right now, but we have to be responsive to the
4
     community that's living here, and we understand that
5
6
     you have a desire to know what's going on in your
7
     neighborhood, and that's important to us.
                    So if you want to, you know, with your
8
9
     comments, you can include comments about that, what
10
     your suggestions might be, and certainly we'll
     consider them.
11
                    I know with the groundwater
12
13
     monitoring, we probably will be probably going to
     maybe annual or twice a year. So we'll have that
14
15
     information coming in too.
16
                    And then, let me request something for
     our sampling too. It would be helpful for us -- I
17
     know we have quite a wealth of information on
18
     sampling the private wells in the area, and we do
19
20
     have more established monitoring wells. But it would
2.1
     be very helpful for us if we could get -- if we could
     get more private wells sampled too.
22
23
                    And our last sampling, we didn't have
24
     a lot of luck with that. So that helps us understand
```

what's going on in the area. And if we need to do

more of a formal monitoring network, that may be 1 something that we have to consider. But if we reach 2 out and ask you guys to help us out with letting us 3 sample your private wells, just kind of think about 4 it because it does help the wealth of information 5 that we have to work with and it gives you a better 6 picture too of what's going on with your groundwater. MS. YOUNG: I appreciate offering 8 9 that, and sometimes you have to pull teeth to get 10 that. And to just put that out there, that's so fantastic. 11 12 MS. HUENI: It's not easy sometimes, 13 but I thought I would take the opportunity. 14 MS. YOUNG: Yeah. I wanted to ask, 15 you mentioned about the occurrence of sampling the monitoring wells, the groundwater, but how often are 16 your air monitors sampled? And I'm curious about the 17 indoor and the outdoor. 18 MS. HUENI: Well, indoor air, we just 19 20 did an indoor air sampling of, you know, the sub-slab 2.1 there at the strip center. And we really wanted to get -- We just finished doing some indoor air and 22 sub-slab sampling there at the strip center there at 23 24 Cypress Shopping Center. So we're waiting on those

results. Those will be coming out like now, but we

1 actually did that. 2 We've been trying to get, you know, a good representation of seasonal sampling because your 3 indoor air, your sub-slab can vary somewhat 4 seasonally. So we wanted to capture that. We didn't 5 6 really have one that was right in the heart of the summer in the Houston heat, so we have that one 8 coming. 9 I think I lost the thread on the 10 question. UNIDENTIFIED SPEAKER: How often? 11 MS. HUENI: Oh, how often. With the 12 13 indoor air, we'll probably be going out there -- if we're seeing changes in trends, we'll be going out 14 15 there probably twice a year to sample. If it's, you know, stabilizing, maybe once a year. We'll just 16 have to see. So we're always looking at those kinds 17 of questions as we get the data back. 18 19 UNIDENTIFIED SPEAKER: No outdoor air 20 sampling? MS. HUENI: You know, for us it's 2.1 really the -- even at the area of the release, you 22 23 know, they do a control point that's like an outdoor 24 sample. But that's more of a standard because you want to compare that to what's going on sub-slab, you 25

```
know, what's going on with indoor area.
1
                    UNIDENTIFIED SPEAKER: And I also have
2
 3
     one more question. Oh, sorry.
                    MR. MUSTERS: You had talked about
4
     wanting to sample more private wells. I don't
5
     remember when, but I would say probably around
6
     2007-ish, somewhere around in there, is that before
     that time the TCEQ was monitoring those wells and
8
     sampling private wells. Then when either the TCEO or
9
10
     the EPA came in and put in their own monitoring
     wells, they quit monitoring and sampling the private
11
12
     wells.
13
                    So I'm here to tell you I have a
14
     private well, and I'd be happy to have you come out
15
     and sample it.
16
                    UNIDENTIFIED SPEAKER: And to give you
17
     the results.
                   (Inaudible.) They don't give you the
     results.
18
                    MS. HUENI: Well, we will. If we get
19
20
     to sample your well, certainly, we'll give you those
     results.
2.1
22
                    UNIDENTIFIED SPEAKER: You haven't.
23
     And you sampled ours.
24
                    MS. HUENI: Okay. Well, if you would
25
     leave your names with us and your addresses, we'll
```

```
1
     get those to you.
2
                    UNIDENTIFIED SPEAKER: Thank you.
                    MS. HUENI:
 3
                                Okay.
                               My question was: How are
4
                    MS. BONTA:
     you letting all of the people in the affected area
5
 6
     know? Are you going door-to-door? Are you doing
     mail-outs?
                    Because a lot of times, in my
 8
 9
     experience, when you send that mail-out, they just
10
     think it's junk mail, and they throw it to the side,
11
     and they have no idea.
12
                    So I was just curious: How are you
13
     letting the affected wells know?
                    MS. HUENI: Well, I don't know.
14
15
     are things that we need think to about. Normally,
     you know, we send out the general mail to the area.
16
17
     Maybe we need be a little bit more strategic on how
18
     we do that. So as we're looking at groundwater,
     there are several ways of evaluating it, maybe we
19
20
     should identify more of a focused area that we can go
2.1
     after, and maybe that makes more sense.
                    I know that we got a question earlier
22
23
     this week which it helps us because sometimes we
24
     don't have the same perspective that y'all do. But
25
     we got a call from a man who was very interested in
```

knowing why he'd gotten this mailer. He said, you know, am I impacted? And I said, well -- and he told the regulator, I said, no, I think you're fine.

2.1

But I said, you know, we do this sort of blanket email, and maybe that's confusing. Maybe we need to get more targeted, and we can think about that.

MR. WALTERS: Well, we do have a site mailing list for the site that we continue to add on to. But you know it would be helpful, and if you have a group of name or a list that you all know of all here and send it to us and we can update the mailing list with that. We can do that.

MS. BONTA: Then also, is Health
Department looking at the health of the people at all
that are in this area? Is there cancer clusters? I
know for a fact there's a cancer moms group. One
particular mom that I know has two children that are
about five and eight, and they have leukemia. And in
their classroom -- and they live up Jones Road, more
towards Grant. And in their classroom they also have
several children with leukemia. And for me that kind
of raises a red flag. Kind of rare that two kids in
one family would both have leukemia.

So I'm just curious: Is the Health

```
Department looking into the health of all of these
 1
2
     people?
                    MS. HUENI: You know, I think when the
 3
     site was initially listed, I think the Health
4
5
     Department was involved then. But if you have
 6
     information you want to share with us, we'll consider
     it, certainly.
 8
                    MS. BONTA: Okay. Thank you.
 9
                    UNIDENTIFIED SPEAKER: (Inaudible.)
10
                    In reference to the results of the
     monitoring of the sampling of the wells, is that the
11
     way TCEQ used to do that is on their website, they
12
13
     would have a spreadsheet with all of the wells listed
14
     and the results from the sampling. So that was
15
     readily available to everybody.
                    MS. HUENI: Yeah, we can do that.
16
                    MR. MEYER: Hey, Camille, I'd like to
17
18
     respond to that. So we cannot, EPA cannot publish
     private well information. The Federal government
19
20
     cannot publish private well information on the web
2.1
     page broadly. The State has an open records policy
     and laws that actually they cannot keep it
22
23
     confidential.
24
                    But EPA laws, the Federal laws are we
25
     consider that your private information. It's your
```

```
property, and it's information about your property.
1
2
     So we will share it with you, the owner, but we
     cannot share it broadly with the public, certainly
 3
     without your permission.
4
                    MS. CARTER: Hi, my name is Jenna
 5
6
     Carter. I'm just a resident that's further down
     Jones. But I was wondering, I read something when
     this initially happened, one of the news reports
8
 9
     about a danger of flooding and how that might
10
     contaminate. The areas around this one specific area
     has seen pretty catastrophic floods within the last
11
     couple of years.
12
13
                    And so I was wondering if that's a
14
     risk? I know Matzke Park is pretty close. So I
15
     didn't know, just as a layperson, I'm not really sure
     what -- I've seen kids like swimming in the flood
16
     waters for that area at the superfund site.
17
                    I want to know who was privy to
18
     knowing about this? And I just wonder if that's a
19
20
     risk if there is flooding, like, does that exacerbate
     the other environmental risks?
2.1
                    MS. HUENI: Well, I think for Jones
22
     Road that that probably is not a risk. And, you
23
24
     know, a lot of times you look for, if your area is
25
     prone to flood, you would be concerned about soil
```

```
1
     contamination or shallow groundwater that may be
     feeding into a creek or whatever.
2
                    We don't really have that here. We've
 3
     got that little shallow water bearing zone.
4
5
    pretty local though, and we don't really -- I'm not
6
     aware that it would be an impact in any surface body
    with flooding.
 8
                    MS. CARTER: No Cypress Creek, or
9
    nothing like that?
10
                    MS. HUENI: I don't think so. I'm not
     aware of that. But you know, the groundwater that --
11
12
    you know, we have that shallow zone. It's pretty
13
     thin too. It's not going to be really a regional
14
     zone. So we're addressing it as a source, but most
15
    of our concern would be the immediate soil around the
    building, under the building, and the deeper
16
17
    groundwater.
18
                    MS. CARTER: Okay.
                                        I found out about
     this meeting by calling my community coordinator
19
20
    because someone posted about that it had increased
     and they posted this on Nextdoor, like the social
2.1
    networking site for the neighborhood. And so they
22
23
    weren't sure at all about what the width was in
24
     Schroeder Oaks Village, in that specific neighborhood
25
    or other neighborhoods close by. Is there a risk to
```

```
the residential -- like people attached to an MUD, do
1
2
     they need to be concerned about the contamination to
 3
     their water?
                    MS. HUENI: You know, if they're on
4
     the public water supply, you should be getting
5
 6
     mailers from the MUD reporting about the quality of
     the water. So if you're connected to the waterline,
     that's a good thing.
 8
 9
                    MS. CARTER: So this wouldn't be a
10
     risk for those?
                    MS. HUENT: Huh-uh.
11
12
                    MS. CARTER: Okay.
                                        Thank you very
13
     much.
14
                    MS. HUENI: Okay. Last chance.
15
                    MR. WALTERS:
                                  This is your chance to
16
     ask questions to us if there's any more concerns or
17
     comments you'd like to make.
18
                    MS. YOUNG: Yes.
                                      Jackie Young.
     earlier she had asked about the half-life of the
19
20
     contaminant. And I really liked your answer about
2.1
     purging, and how you remove the vapors. But I
     understood her question more directed toward soil and
22
     the concern of it potentially releasing again in
23
24
     other areas, like the site has done in the past.
                    So can you talk a little bit about the
25
```

contaminants of concern and their affinity in the environment and how they act? Because I think also that would help us understand flooding and the concerns there as well.

MS. HUENI: Yeah, I can give that a

2.1

shot. At this site we know that the initial release was PCE or tetrachloroethene. Now, that is -- and that was probably a single contaminant because that was used with the dry cleaning process. But it actually degrades into TCE, and then 1,2-dichloroethene (DCE), and then it eventually transforms into vinyl chloride.

So what's interesting, and we're watching this. We actually see this effect in the vapor phase when we -- when we're doing our sampling was that at the heart of the source, you have your highest concentration of PCE but you're also starting to see TCE, and the other things show up.

And in this one area -- I think I've got a map back there that actually shows this -- is that we're showing a little bit of migration a little bit further south, in that one block, so it's still in the immediate area. But we know the process is actually ongoing naturally because we're starting to pick up this other vapor thing that's coming a little

```
bit more south. And it's primarily the degradation
1
     products like TCE, and I think even a little bit of
2
3
     vinyl chloride.
                    So that is something that we're aware
4
     of, but all the contaminants in that degradation
5
6
     cycle, those are all considered contaminants of
     concern for the site, and they're listed as that in
     the ROD.
8
 9
                    So we're always looking at what's the
10
     level of each of those. Not just the PCE, but we
     want to take it all the way down.
11
12
                    Does that help?
13
                    UNIDENTIFIED SPEAKER: What is the
14
     lifespan of those chemicals?
15
                    MS. HUENI: I don't really know off
     the top of my head.
16
17
                    MR. MEYER: I'll try. So these type
     of chlorinated organics really depends on where it's
18
     located. If it's sitting out in the sun, it could be
19
     minutes or hours. If it's in the soil, it could be
20
2.1
     years. If it's in the groundwater, it can be years.
                    So it just really depends on where
22
23
     it's located, and what types of things it's being
24
     subjected to. These chemicals degrade fairly well.
25
     In other words, bacteria will transform them into
```

other chemicals.

2.1

And that's when Camille talked about the shallow groundwater zone, we're actually able to do an injection of a material that's essentially food for the bacteria that's in the groundwater that gives them a lot -- it grows that bacteria and they can transform the chemicals into harmless chemicals. So it really depends on the environment that it's in.

In a vapor phase, again here it's fairly long because it's been there for a long time, right? I mean, this release happened many years ago. So we've determine the best thing to do is to get in there and physically remove that chemical out of the ground, and that's what the soil vapor extraction does. The soil vapor extraction pulls it out safely so we can dispose of it.

When it's in the groundwater, we have found that the easiest thing to do is to inject things that allow the groundwater -- the bacteria in the groundwater to transform those chemicals into something safe.

UNIDENTIFIED SPEAKER: Has this been treated at all yet?

MR. MEYER: Yes. So the shallow water bearing zone, the injection has been started and that

degradation is ongoing, and that's good. As we said earlier, our objective for this whole site is to have all of the groundwater in this area be safe to consume.

2.1

The only way we can do that is to remove the sources of that contamination to the groundwater. So the soil vapor extraction will remove the chemicals in the soil that are acting as a continuing source. The in-situ bioremediation that is already ongoing is degrading the chemicals that are in the subsurface that are going to act as a continuing source of groundwater contamination.

But the only way we can get in there and have long-term success at this site is to both degrade the chemicals that are in the groundwater or remove them through the soil vapor extraction.

UNIDENTIFIED SPEAKER: It's been degrading well, and yet you're now showing that it is spreading some of the sub-chemicals?

MR. MEYER: The chemicals that are in the groundwater are going to continue to move, and as they move, they do degrade some. So we see natural degradation all the time. And at some point you actually get to a level that they're low enough that what's naturally there can handle it.

When it's very high, when the chemical 1 is at a high concentration, what's naturally there in 2 the soil just can't handle it. That's why we have to 3 use the in-situ bioremediation. We add more food for 4 the bacteria that's there, so it can handle these 5 6 higher concentrations. 7 But what we typically see is that at some point we get it low enough that the natural 8 9 conditions will degrade these chemicals. So the good 10 news about this type of chemical, it does degrade fairly well but you have to get the highest 11 concentrations out in order for that to occur. 12 13 MR. MANNINA: My name is Joe Mannina. 14 You might go to Harris County on this particular one. 15 But I noticed on Figure 1 it shows the restricted area for drilling a well has been greatly decreased. 16 Can someone answer that? 17 MS. LONG: The restricted drilling 18 was -- I think it was about 2003/2004? 19 20 MR. MANNINA: It took up this whole 2.1 area in the red, and now it's reduced back quite a bit. 22 23 MS. LONG: Okay. The restricted 24 drilling area came prior to the red boundary. So the 25 yellow was initially done in very early stages, and

```
1
     the boundary was drawn based on the information
     available at the time. And that restricted drilling
2
     boundary was what the State of Texas requested from
 3
     the Department of Licensing and Regulation and the
4
     Water Well Drillers Board, and so that line was
5
6
     defined very early on.
                    Then as you know, and you know too
     when we did all that expanded sampling on a quarterly
8
     basis, we had a better idea of where some of the
 9
10
     impacted water wells were. And then subsequently the
     red boundary, which was the water service boundary
11
     and became the site boundary, was expanded but that
12
13
     small restricted drilling area stayed the same.
                    MR. MANNINA: No, that's not correct.
14
15
                    MS. LONG: The restricted drilling
     area is the yellow boundary.
16
                    MR. MANNINA: I understand.
17
                                                 That's
                   It included the whole area back here
18
     not correct.
     all the way up to the back -- well, I'm looking to
19
     the north where the red line is. And I know that
20
2.1
     because I live on one of those streets, and it's no
     longer a restricted area and it was.
22
23
                    MS. LONG: Well, this is the only
24
     restricted boundary that I know from --
25
                    MR. MANNINA: That's not the way it
```

```
was in Harris County, that's for sure.
1
2
                    MS. LONG: But then Harris County
     passed an ordinance that then mirrors the red
 3
     boundary. That was a separate action from the State
4
5
     action that defined the restricted drilling.
 6
                    MR. MANNINA: Are what you saying is
7
     that the yellow line is for the State only?
                    MS. LONG: The yellow line is what was
 8
 9
     defined very early on and that was before we had a
     lot of the additional data.
10
                    MR. MANNINA: Is that still the
11
     boundary, the yellow?
12
13
                    MS. LONG: That restricted drilling
     that's under State jurisdiction has remained the
14
15
     same. Now, Harris County is the one that passed the
     ordinance that matches our site boundary which is
16
     red. So that covers that.
17
                    So there's an overlap, and then
18
     there's some that doesn't cover. You know, the
19
20
     restricted goes further south of the red boundary.
2.1
     It's kind of an offset from the red boundary.
                    MR. MANNINA: The reason I'm asking is
22
     because people who still have wells that were in the
23
24
     restricted area, they were told not only could they
25
     not redrill the well, they couldn't repair the well.
```

```
They couldn't just go ahead and pull a pipe out if
1
2
     they had a leak or something that came in there. You
     couldn't do anything. They basically would have to
3
     go on the water system.
4
                    That's why I'm asking because the way
5
6
     this thing is drawn, it appears like that doesn't
     apply anymore to several of the areas that are out
8
     there.
                    MS. LONG: Well, Harris County, you
9
10
     know, there's a difference between the State and the
     Harris County regulations. Now, with the restricted
11
     drilling, what I do know from the water well drillers
12
13
     group, is that they do not even use the word prohibit
     in their regulations.
14
15
                    They may have more strict construction
                   If, let's say, you were going to drill
     regulations.
16
     deeper, there would have to be more strict drilling
17
     and completion protocol.
18
                    Now, the Harris County ordinance, if I
19
20
     recall correctly, and this is quite a while ago. I
2.1
     haven't worked on the site that much recently. But
     on the Harris County regulations, they do use the
22
23
     word "prohibit" for drilling.
24
                    So the difference between the State
     recommendation and limitations versus the local
25
```

```
1
     ordinance that does use the word "prohibit." So
2
     there's multiple layers there.
                    MR. MANNINA: Well, it's just a little
 3
     bit confusing to have a line that says no drilling,
4
     and then it doesn't equate with what was there
5
6
     before. That's why I'm concerned about it because
     it's more than confusing. It seems to me they need
     to get their act together and make it either no
 8
 9
     drilling, or it is that you have the right to go
10
     ahead and do so.
                    MS. LONG: Well, again, I'm not an
11
12
     attorney, so I'd have difficulty answering on that
13
     one.
14
                    MR. WALTERS: Here's another question.
15
     Go ahead and introduce yourself.
16
                    MS. BHAI: My name is Deborah Bhai.
     I'm a resident in the area. And I may not understand
17
     all of this, but I do have a question on, is there
18
     any monitoring that is being done on the injections
19
20
     of what is being, quote/unquote, injected?
2.1
                    I may have misunderstood that. But
     what is being injected to clean up?
22
23
                    MS. HUENI: Yes. We actually have
24
     quite a few monitoring wells in the immediate area.
25
     We actually did the injection on that, basically in
```

```
the parking lot of where the Cypress Shopping Center
1
2
     is, and I think what we're injecting is -- Can you
     help me with this, Pat?
 3
                    MR. APPEL: Yes. Back in January of
4
     2016, there was a series of 63 bore holes drilled
5
 6
     throughout in here and around the back side of the
     building. An amendment was installed in each of
     those borings down to the shallow source area which
 8
 9
     was about 20, 30 feet deep, and so that's the
10
     immediate area that was treated, that source area.
                    And the material, like John said, is
11
     food basically, to eat that contaminant up.
12
13
                    MS. BONTA: What's the technical name
     of the food?
14
15
                    MR. APPEL: The food?
                    MS. BONTA: The food, what is the
16
     food?
17
18
                    MR. APPEL: It's a proprietary blend
     that a company created. It's called EHCL. It's an
19
20
     oil-type material that is proprietary, and the
2.1
     vendor's name escapes me, but it's a registered
     trademark name.
22
23
                    So it's biodegradable. It can go into
24
     the ground. Basically it enhances the degradation of
25
     the volatile organic compounds, this material which
```

```
is PCE. So it goes through that life cycle process
1
2
     faster, gets rid of it guicker.
                    MS. BHAI: And then what happens to
 3
     it?
4
 5
                    MR. APPEL: It goes away. So the
     source is the soil. That's what's going to be
6
     treated in soil vapor extraction. When you treat the
    ground water and you enhance that process, it goes
8
9
     away into a benign material.
10
                    MS. BHAI: So it's not a bacteria?
                    MR. APPEL: No. The bacteria eats the
11
12
    volatile organic compounds.
13
                    MS. BHAI: Right. So if that enhances
14
     the bacteria, and if there's too much bacteria and
15
    overproduces bacteria, then what happens?
16
                    MR. APPEL: That's just good bacteria
     in the ground that keeps eating bad stuff.
17
                    MS. BHAI: Right. What is the good
18
19
    bacteria?
20
                    MR. APPEL: That's that proprietary
     chemical, EHCL.
2.1
22
                    MS. BHAI: What's the name of the good
23
    bacteria that you're using?
24
                    MR. APPEL: It's bacteria. It's
25
    bacteria. I quess, it's a --
```

```
1
                    MR. MEYER: So it's a natural microbe
2
     that's in the ground. It's all around us. I mean,
    healthy soil is teaming with microbes. I mean,
 3
     that's a good thing. So there's all sorts of healthy
4
5
    bacteria in the soil. We know it's there, and then a
6
     lot of it will consume these types of chemicals. I
    mean, that's why the earth regenerates itself many
     times.
8
9
                    So we're just trying to jump start
10
     that a little better by adding the food into the
11
     system. And what happens is the bacteria will bloom
    because they have a lot of food. They'll consume
12
13
     this chemical, and then the bacteria die off and
14
    become kind of steady state again, what's normal for
15
    that system.
16
                    And so that's kind of what happens in
     these systems. We add all this food.
17
                                            The bacteria
    become very active. They eat a lot more chemical.
18
    And then, when the bacteria's out of food, they die.
19
20
    You know, the bacteria just subsides back into the
     soil.
2.1
22
                    MS. BHAI: Okay.
23
                    MR. APPEL: There is a large number of
24
    wells that are currently installed here that they get
25
     sampled routinely to verify that that reductive
```

```
1
     chlorination process is happening. And so if the
     levels start to increase in that source material,
2
     then a hot spot treatment is conducted again to add
 3
     more of that material to continue enhancing that
4
5
     process.
                    So like Camille said, this is an
 6
7
     ongoing process of monitoring the groundwater and
     then adding additional amendment if those levels
 8
9
     start to come back up.
10
                    MS. BHAI: Okay. But I'll go back to
     my original question: Is that bacteria being
11
     monitored in case it does not die off? That's my
12
13
     original question.
                    MR. APPEL: No.
14
                                     Because that's not --
15
     that's not typically what gets monitored. What gets
     monitored is the contaminants of concern at this
16
     site.
17
18
                    MS. BHAI: Okay. Thank you.
19
                    MR. HIGH: My name is Dwayne High.
20
     the northwest of SVE 2, the contours are very tight,
2.1
     and I would think you would want to take a look at a
     site to the northwest of that to see if you've got
22
23
     something else going on up there. It's just a
2.4
     comment that I had.
25
                    MS. HUENI: Okay, thank you. Okay.
```

```
We'll look at that. Thank you.
1
2
                    MR. WALTERS: Okay. Let's continue
     on. We have a little more time here, if you have any
3
     comments or concerns. It doesn't have to be
4
     questions. If you want to make a statement about
5
6
     this project, this site at this time this is your
     chance, your opportunity to do that.
                    We haven't heard anything from anyone
8
9
     back over there in that corner. Do y'all want to say
10
     anything? Anything you want to add?
                    I knew there was a question over
11
12
     there.
13
                    UNIDENTIFIED SPEAKER: I don't live
     around here. I teach at Cypress Creek High School.
14
15
     I've been there for 31 years.
                    And I'm just curious, is there anyone
16
17
     here from CFISD? Oh, yes, okay. Thank you.
                    Marlene put it on Facebook, I
18
     contacted my science coordinator, and once we got
19
20
     verification that there was a meeting here tonight,
2.1
     then it was supposed to be sent out, and I just
     thought droves of environmental science teachers
22
23
     would be here. And I'm sorry, but we will be on top
24
     of it.
25
                    So you talked about communication.
```

```
1
     And so do we communicate with the school district,
2
     since we have three schools right in this zone? I
     mean, are they getting extra little emails: Hey, did
 3
     any of you want to show up at this meeting and get
4
5
     information?
                   Okay.
                    The second thing is, since I'm a
 6
     classroom teacher, can I get a class set of
7
     materials, please?
8
 9
                    I asked first and I'm the only one
10
     here, so...
11
                    MS. HUENI: Sure. If you want the
12
     maps, you can take them too.
13
                    UNIDENTIFIED SPEAKER: Oh, my gosh.
     I'm sorry. I know this is serious for all of you,
14
15
     but I'm out there educating kids. I teach
     environmental science, and I teach environmental
16
     science out at Loan Star College also. So this is
17
     huge for us to get involved in this.
18
                    I feel remiss that I have not been
19
20
     involved. I am embarrassed that I am not aware of
2.1
     what was right around the corner from me.
                    Second thing, I just went to a Water
22
     Quality Meeting last week. A paper was produced, 40
23
24
     years of wells studies in the Chicot and the other
25
     two aquifers. So they have 700 wells they have
```

```
monitored over 40 years, and 30 from TCE-213
1
2
     extensometers -- am I saying that right -- where they
     measure the subsidence links.
 3
                    The wells are there, can't we just
4
     throw something down there and take a sample out?
5
6
     mean, the drilling has been done. It's interactive.
     It's online. And there are papers there, so I was
     wondering about something.
8
 9
                    My two questions were links, are we
     not linking to the Cy-Fair School District? And are
10
     we not linking to USGS and TCEO with their wells in
11
     this area?
12
13
                    And thank you. Y'all heard the
     promise, I get a class set.
14
15
                    MR. WALTERS:
                                  Thank you very much.
     Our agency really supports environmental education,
16
17
     and that's what you're talking about.
                    MS. HUENI: I think we'll look into
18
     that about the schools, you know, make sure that it's
19
20
     getting back to the right people at the high schools
2.1
     and the area schools. Because if you have it, that
     would be great because we're growing scientists too.
22
23
                    Thank you for your comments.
24
                    MR. COX: Colin Cox. I was just
25
     curious if there are any plans to offer more
```

```
waterline hookups to anyone in that area?
1
                    MS. HUENI: Well, I think that's a
2
     possibility. One of the things that we're going to
 3
     be doing also is looking at doing another
4
5
     reevaluation of the status of the wells in the area.
     Who's still using private wells? Who's hooked up?
6
     Who isn't?
                    So that is under consideration, and we
 8
9
     can talk about that probably at the next groundwater
10
     meeting when we have a little bit more information to
     share.
11
12
                    Thank you.
13
                    MS. YOUNG:
                               I keep forgetting.
                                                     I have
     two points, so I don't forget. One is, can I request
14
15
     at least a minimum of two weeks' notice for a public
16
     meeting?
17
                    MS. BONTA:
                                That way we can rally
18
     people and get them here.
19
                    MR. MEYER: So at the next meeting, we
20
     can certainly give a two week notice.
2.1
                    MS. HUENI: I think maybe it's a good
     idea to even have a pre-mailing, save the date, or
22
     whatever, get that a little further out. So that's a
23
24
     good idea.
25
                    MS. YOUNG: Great.
```

```
And my second point, the map that has
1
     the delineation, the colors.
2
                    MS. HUENI: Yeah.
 3
                    MS. YOUNG: Could you go back to that
4
5
     one, please?
6
                    I haven't knowingly been to that exact
7
     area. And I was just wondering if anyone can tell us
     what's going on there because it looks like there's
8
9
     been some digging or something like that that's gone
10
     on, on the border of the green.
                    MS. HUENI: On the east side?
11
                    MS. YOUNG: Yeah. On the left side.
12
13
                    MS. HUENI: On the left side, yeah.
     That's Ace Hardware.
14
                           They own that property now.
15
                    MS. YOUNG: Is there any, like,
     restriction? Because it kind of looks like there's
16
17
     some digging, or I don't know if it's gravel.
18
                    MR. MEYER: It's a lay down yard.
19
     It's gravel.
                   They use it -- It's a lay down yard.
20
     They'll put a firework stand over there during
2.1
     fireworks time. They use it for storage. Things
     like that.
22
23
                    MS. YOUNG: Okay.
                                       I just wanted to
24
     make sure, with these kind of contaminants, they
25
     weren't just over there digging.
```

1	MR. MEYER: No.				
2	MS. YOUNG: Okay. Thank you.				
3	MR. MEYER: No, and he's accommodating				
4	for the work that gets done over there. Because				
5	there's two wells located in that you see that far				
6	one? That's actually on that property.				
7	MS. YOUNG: Yeah, okay. Just wanted				
8	to make sure nobody was over there digging it up.				
9	Thanks.				
10	MR. MUSTERS: Just a comment. When				
11	this all got started and the neighborhood got				
12	together and found out about what was going on here,				
13	even before TCEQ got involved back in '02, we were				
14	told at that time that it would take probably 20				
15	years for this to get cleaned up. We all thought				
16	that was absolutely insane.				
17	Here we are, we're getting awful damn				
18	close. I think it's unbelievable that it's taken				
19	this long to get to this point.				
20	MR. WALTERS: Okay. Are there any				
21	more questions or comments?				
22	MS. WOOD: Mary Wood. Whether or not				
23	it's wells or are these septics by any chance? Is				
24	that building on a septic, or is it on a city?				
25	MS. HUENI: You know, they originally				

```
were on septic because I think we just talked about
1
     that this afternoon.
2.
                    MS. LONG: I don't know on current,
 3
     but it used to be septic.
4
 5
                    MS. WOOD: Is that monitored where the
     drain lines were?
 6
 7
                    MS. LONG: There was -- oh, a number
     of years ago we took soil samples that traversed
 8
 9
     around the septic tank, the lines, and the leach
10
     field. And that was in the real early reports that
     we did on initial investigation.
11
                    And I -- you know, I can't -- It's
12
13
     been a number of years. I can't recall the data, but
     I know that we did explore that option as a potential
14
15
     path line.
16
                    MS. LOBBERECHT: Marilyn Lobberecht.
17
                    Have the businesses been notified, and
     has it been recorded? So that -- Businesses here are
18
     torn down frequently and shopping centers, and then
19
20
     we put up high rise businesses and hospitals and you
2.1
     name it.
                    How is that being noted that that
22
23
     property is contaminated, and that it may rebound?
24
                    And how are you protecting future
2.5
     businesses and owners and homeowners?
```

MS. HUENI: Part of our process, and 1 2 we usual usually do this during the remedial action phase when we're doing construction, sometimes 3 design, but one of the things that we like to do is 4 place what we call institutional controls for the 5 6 site, which can be anything from a deed notice to a deed reformation that actually tells current, as well as future property owners, what's on their property. 8 9 MS. BONTA: Pamela Bonta. So I walked 10 that strip plaza yesterday, and I talked to each and every business owner. So those business owners 11 aren't the property owner. A lot of them did not 12 13 speak English well, and a couple of them were totally 14 unaware. 15 The Indian gentleman that owns the shop directly over the site couldn't make this 16 meeting because he said he's the only one that works 17 there, and so he has to be in his store, and he can't 18 keep up with it. But most of them are just renting 19 20 that space, and I found that they really don't know 2.1 what's going on. 22 MS. HUENI: There's a property manager 23 on site too that helps us with that. But, you know, 24 we also went by the Indopak Store today and left the

flyer for the meeting. And I do think it's our

25

```
responsibility to go out and talk to the individual
1
2
     property lessees, and we'll make sure that we do
 3
     that.
                    MS. BONTA: Yeah.
4
 5
                    MS. HUENI: That's information
     involved.
6
 7
                    MS. DOUCET: I'm Marva Doucet, and I
     live in the area but outside this red line. And I
 8
 9
     would just like to request that my property be
10
     tested, or I'd like to know if some property close to
11
     me.
12
                    MS. HUENI: Okay.
13
                    MS. DOUCET: How deep were the wells
14
     that were prohibited or that were connected to the
15
     water supply? Do you know how deep that was?
                    MS. HUENI: Well, I think most of the
16
17
     private wells were --
                    Do you remember, Marilyn? Were they
18
19
     about 200 feet?
                    MS. LONG: There was a range.
                                                   The
20
2.1
     older wells -- I'm going by memory again too.
     older wells, you know some of the first residents
22
23
     were relatively shallow, even some of them, I think,
24
     less than 200 feet.
25
                    Then as folks moved in, and they
```

```
1
     wanted a -- let's say, a continuous supply of water,
2
     and not be affected, then they went in the 200- to
     maybe the 300-foot range. Some of the wells that we
 3
     sampled, and private wells, we had some that were 375
4
     feet, 425. That was relatively recent ones. But I
5
 6
     think between the 200 to 300 range would cover a
     large representation of the wells.
 8
                    MS. DOUCET:
                                 Thank you. Are you going
 9
     to have a sign-up sheet?
10
                    MS. HUENI: Yeah. Actually, when you
     asked that question, I think we've gotten enough
11
12
     questions from private water well owners, I'd like to
     get your name and your contact information, so that
13
     as we start going back and reassessing the private
14
15
     wells, and that the ones who are here who are who are
     requesting special information, that we get that
16
     down.
17
18
                    MS. DOUCET: Well, I just wrote it on
19
     the sign-up sheet that I requested.
20
                    MS. HUENI: You did?
                                          Okay.
2.1
                    How about y'all, did you?
                    UNIDENTIFIED SPEAKER: We can add it.
22
23
                    MS. HUENI: Thank you. Are we done
2.4
     here?
25
                    MR. WALTERS: Yeah. We are going to
```

```
start wrapping up here. Does anyone have anything
1
2
     else they'd like to say or state at this time before
     we close up the meeting?
3
                    Do you want to go over again the
4
5
     comments, Camille, the dates and how they can do
 6
     comments?
 7
                    MS. HUENI: Okay. Just as a reminder,
     the public comment period is from August the 7th
8
9
     through September the 5th. It's a 30-day period.
     all comments need to have some kind of date mark or
10
     be postmarked by that end date for them to be
11
12
     incorporated in the comment response.
13
                    And you can do written comments if you
14
     have the proposed plan or the facts sheet, the
15
     contact information is there. Don's name is on it.
     I think typically we send written comments to Don.
16
     But also Raji Josiam will be the project manager, is
17
     also listed as a contact for either written comments
18
     or including emails. We know people like to do that
19
20
     too.
2.1
                    Anyway, we look forward to getting
     your comments or thoughts, and we will certainly
22
23
     consider them.
24
                    MR. WALTERS: Okay. This concludes
25
     the public meeting on the Jones Road Superfund site.
```

1	(Public meeting concluded at 8:07 p.m.)				
2	THE STATE OF TEXAS)				
3	COUNTY OF HARRIS )				
4	REPORTER'S CERTIFICATION				
	PUBLIC MEETING, JONES ROAD SUPERFUND SITE				
5					
6					
7	I, Kara Y. Dickinson, hereby certify that the				
8	facts stated in the foregoing pages are true and				
9	correct.				
10					
11	I further certify that I am neither counsel for,				
12	related to, nor employed by any of the parties or				
13	attorneys in this action, and further that I am not				
14	financially or otherwise interested in the outcome of				
15	the action.				
16					
17	GIVEN UNDER MY HAND on this the 10th day of				
18	August, 2017.				
19	Kara y. Dickinson				
20	100 ac y suporcord				
21	Kara Y. Dickinson				
22	Notary Public ID No. 564162-9 Firm Registration No. 122 U.S. Legal Support, Inc. 363 N. Sam Houston Parkway East				
23					
24	Suite 1200 Houston, Texas 77060				
25	(713)653-7100				

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